

CONTENTS

(Full texts are incorporated in CJESEVIER, a file in the Chemical Journals Online database available on STN International; Abstracted, indexed in: Aluminium Abstracts; Anal. Abstr.; Biol. Abstr.; BIOSIS; Chem. Abstr.; Curr. Contents Phys. Chem. Earth Sci.; Engineered Materials Abstracts; Excerpta Medica; Index Med.; Life Sci.; Mass Spectrum. Bull.; Material Business Alerts; Metals Abstracts; Sci. Citation Index)

Special Issue

Analytical Horizons, An International Symposium celebrating the publication of Volume 500 of Analytica Chimica Acta, Ellecom, The Netherlands, 14–16 May 2003

Foreword	1
Coupled enzyme reaction microarrays based on pin-printing of sol–gel derived biomaterials N. Rupcich and J.D. Brennan (Hamilton, Canada)	3
Immunoassays using capillary electrophoresis laser induced fluorescence detection for DNA adducts H. Wang, M. Lu, N. Mei, J. Lee, M. Weinfeld and X. Chris Le (Edmonton, Canada)	13
Review – Current status of modern analytical luminescence methods S. Kulmala and J. Suomi (HUT, Finland)	21
Review – Time-resolved fluorescence spectroscopy for illuminating complex systems F.V. Bright and C.A. Munson (Buffalo, NY, USA)	71
Review – Resonance light scattering technique used for biochemical and pharmaceutical analysis C.Z. Huang and Y.F. Li (Chongqing, PR China)	105
Novel determination of cadmium ions using an enzyme self-assembled monolayer with surface plasmon resonance L. May May and D.A. Russell (Norwich, UK)	119
Plasticizer-free microspheres for ionophore-based sensing and extraction based on a methyl methacrylate-decyl methacrylate copolymer matrix S. Peper, A. Ceresa, Y. Qin and E. Bakker (Auburn, AL, USA)	127
Spectroelectrochemical responsiveness of a freestanding, boron-doped diamond, optically transparent electrode toward ferrocene S. Haymond (East Lansing, MI, USA), J.K. Zak (Gliwice, Poland), Y. Show (East Lansing, MI, USA), J.E. Butler (Washington, DC, USA), G.T. Babcock and G.M. Swain (East Lansing, MI, USA)	137
Portable instrument for electrochemical gas sensing R. Knake and P.C. Hauser (Basel, Switzerland)	145
Investigation of equilibration and uncertainty contributions for the determination of inorganic mercury and methylmercury by isotope dilution inductively coupled plasma mass spectrometry R. Clough, S.T. Belt, E. Hywel Evans (Plymouth, UK), B. Fairman and T. Catterick (Teddington, UK)	155
Methodological advances for selenium speciation analysis in yeast J.R. Encinar, M. Śliwka-Kaszyńska, A. Polatajko, V. Vacchina and J. Szpunar (Pau, France)	171
Multivariate calibration. What is in chemometrics for the analytical chemist? R. Bro (Frederiksberg, Denmark)	185
Chemometrics applied to unravel multicomponent processes and mixtures. Revisiting latest trends in multivariate resolution A. de Juan and R. Tauler (Barcelona, Spain)	195
Chemometric analysis of comprehensive two-dimensional gas chromatography data using cryogenic modulation L. Xie, P.J. Marriott and M. Adams (Melbourne, Australia)	211

Developments toward a complete micro-total analysis system for Duchenne muscular dystrophy diagnosis J.P. Ferrance, Q. Wu, B. Giordano, C. Hernandez, Y. Kwok (Charlottesville, VA, USA), K. Snow, S. Thibodeau (Rochester, MN, USA) and J.P. Landers (Charlottesville, VA, USA)	223
Drug detection based on the conformational changes of calmodulin and the fluorescence of its enhanced green fluorescent protein fusion partner E. Dikici, S.K. Deo and S. Daunert (Lexington, KY, USA)	237
Review – Nanoparticle-based electrochemical DNA detection J. Wang (Las Cruces, NM, USA)	247
Static secondary ion mass spectrometry for organic and inorganic molecular analysis in solids R.V. Ham, L.V. Vaeck (Wilrijk, Belgium), A. Adriaens (Ghent, Belgium) and F. Adams (Wilrijk, Belgium)	259
Review – Clinical applications of chemiluminescence L.J. Kricka (Philadelphia, PA, USA)	279
Atrazine analysis using an amperometric immunosensor based on single-chain antibody fragments and regeneration-free multi-calibrant measurement K. Grennan (Dublin, Ireland), G. Strachan, A.J. Porter (Aberdeen, UK), A.J. Killard and M.R. Smyth (Dublin, Ireland)	287
Increasing the scope and power of flow-injection analysis through chemometric approaches B. Karlberg and R. Torgrip (Stockholm, Sweden)	299
Contribution of migration current to the voltammetric deposition and stripping of lead with and without added supporting electrolyte at a mercury-free carbon fibre microdisc electrode S.M. Silva and A.M. Bond (Clayton, Australia)	307
Seeking connectivity between engineered proteins and transducers: connection for glutathione S-transferase fusion proteins on surface plasmon resonance devices V.G. Praig and E.A.H. Hall (Cambridge, UK)	323
Light emitting diode-based detectors. Absorbance, fluorescence and spectroelectrochemical measurements in a planar flow-through cell P.K. Dasgupta, I.-Y. Eom, K.J. Morris and J. Li (Lubbock, TX, USA)	337
Review – The evolution of chemometrics P.K. Hopke (Potsdam, NY, USA)	365
Author Index	379
Calendar of forthcoming meetings	N1

ChemWeb.com
central to science

CONTENTS
Direct

This journal is part of **ContentsDirect**, the **free** alerting service which sends tables of contents by e-mail for Elsevier books and journals. You can register for **ContentsDirect** online at: <http://contentsdirect.elsevier.com>



Full text of this journal is available, on-line from **ScienceDirect**. Visit www.sciencedirect.com for more information.

